

BLUE EARTH COUNTY HIGHWAY DEPARTMENT

CONSTRUCTION PLAN FOR BITUMINOUS
OVERLAY & AGGR. SHOULDER

COUNTY STATE AID HIGHWAY NO. 15



BEGIN S.A.P. 07-615-08

STA 121+16

END S.A.P. 07-615-08

STA 141+66



T 107 N

R 25 W

DESIGN DESIGNATION

ADT (Current Year) 1533 2012
ADT (Future Year) 2453 2032
ADT (Heavy Commercial)
ESAL 237,000
10 TON DESIGN
R-VALUE 10
DESIGN SPEED 30 MPH
DESIGN SPEED NOT ACHIEVED AT:
SOIL FACTOR 130
SHOULDER WIDTH
STOPPING SIGHT DISTANCE BASED ON
3.5' HEIGHT OF EYE
0.5' HEIGHT OF OBJECT

GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT
OF TRANSPORTATION'S "STANDARD SPECIFICATIONS
FOR CONSTRUCTION" SHALL GOVERN.

PLAN NOT TO SCALE

INDEX OF SHEETS

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BETWEEN: AGENCY ST. AND CR 173
FROM: A PT APPROX. 2245' E. & 880' N. OF THE
SW COR. OF SEC. 8-107-25
TO: A PT 1048.6' W OF THE COR. OF SEC.
17-107-25

GROSS LENGTH 2050.00 FEET 0.388 MILES
BRIDGE LENGTH 000.00 FEET 0.000 MILES
NET LENGTH 2050.00 FEET 0.388 MILES

OVERLAYED IN: 1992 UNDER SAP 07-615-05
SURFACED IN: 1974 UNDER SAP 07-643-01
GRADED IN: 1974 UNDER SAP 07-643-01

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE
COMPLIED WITH, IN THE CONSTRUCTION OF THIS PROJECT.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED
BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Alan Forsberg
COUNTY ENGINEER ALAN FORSBERG

DATE *05/12/12* L.I.C. NO. 14720

Robert J. Forsberg
DISTRICT STATE AID ENGINEER FOR COMPLIANCE WITH STATE-AID RULES/ALICY DATE *3/12/2012*

Robert J. Forsberg
STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING DATE *3/12/2012*

S.A.P. 07-615-08 SHEET NO. 1 OF 6 SHEETS

ESTIMATED QUANTITY

ITEM NO.	ITEM	UNIT	CSAH #15	NON PART.	TOTAL
2232.501	MILL BITUMINOUS SURFACE	SO YD	3188	0	3188
(1)	2357.502 BITUMINOUS MATERIAL FOR TACK COAT	GAL	513	0	513
(1)	2360.609 BITUMINOUS MATERIAL FOR MIXTURE (PG 58-28)	TON	33	0	33
(1)	2360.609 BITUMINOUS AGGREGATE (CLASS "A" INTERMEDIATE)	TON	186	0	186
(1)	2360.609 BITUMINOUS AGGREGATE (CLASS "A" FINE)	TON	159	0	159
(1)	2360.609 BITUMINOUS AGGREGATE (GRAVEL INTERMEDIATE)	TON	133	0	133
(1)	2360.609 BITUMINOUS AGGREGATE (GRAVEL FINE)	TON	53	0	53
(1)	2360.609 BITUMINOUS (PRODUCE, HAUL, & LAY)	TON	564	0	564
(1)(2)	2506.522 ADJUST FRAME & RING CASTING	EACH	27	0	27
(3)	2580.501 TEMPORARY LANE MARKING	L IN FT	164	0	164

- (1) BASIS OF PAYMENT SPECIFIED IN SPEC. 1903 SHALL BE MODIFIED TO PRECLUDE ANY PRICE ADJUSTMENT FOR INCREASED OR DECREASED QUANTITIES.
- (2) APPROXIMATE: 22 MANHOLES & 5 WATER VALVE BOX. CONCRETE OR CAST IRON ADJUSTMENT RINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO RAISING.
- (3) PLACED ON EVERY LIFT, REMOVED BEFORE NEXT LIFT AND PRIOR TO STRIPING.

CERT. BY Alan Forberg LIC. No. 14720 MAR. 10, 2012 S.A.P. 07-615-08 SHEET NO. 2 OF 6 SHEETS

PROFESSIONAL ENGINEER

BASIS FOR PLANNED QUANTITIES

BITUMINOUS SURFACE

BITUM. MAT'L FOR TACK COAT 0.05 GALS. PER SQ. YD.

BITUM. MAT'L FOR WEAR COURSE AC (PG 58-28) 5.8% BY WEIGHT

BITUM. COURSES, 110 LBS. PER 1" / SQ. YD.

AGGREGATE PROPORTIONS : 35% CLASS "A" INTERMEDIATE

30% CLASS "A" FINE

25% GRAVEL INTERMEDIATE

10% GRAVEL FINE

THE FOLLOWING STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY

STANDARD PLATES	
PLATE NO.	DESCRIPTION
4108F 80001	ADJUSTING RINGS STANDARD BARRICADES

CERT. BY

Alan Fording
PROFESSIONAL ENGINEER

LIC. NO. 14720 MAR. 10, 2012

S.A.P. 07-615-08

SHEET NO. 3 OF 6 SHEETS

CSAH 15 SUPERPAVE BITUM. CALCULATIONS

LOCATION		LENGTH FEET	AVER WIDTH FEET	DEPTH INCHES	WEAR TON	BINDER TON	BITUM MAT'L TON	TACK COAT GAL
BITUM. WEAR								
STA	121 + 16 TO STA	141 + 66	2050	45	1	564	32.7	513
TOTAL						564	0	513

P:\BITUM\2bitum\CSAH 15\115 SUPERPAVE.xls/A

CSAH 15 SUPERPAVE BITUM. QUANTITIES

WEAR	MIX TONS	BITUM MAT'L 5.8% TON	TOTAL AGGR. TONS	BITUM CL. "A" INTERM 35% TON	BITUM CL. "A" FINE 30% TON	BITUM GRAVEL INTERM 25% TON	BITUM GRAVEL FINE 10% TON	PRODUCE HAUL LAY TON
WEAR	564	33	531	186	159	133	53	564
TOTAL				186	159	133	53	564

MILL BITUM. SURFACE

SAP 07-615-08

STATION TO STATION	LOC.	LENGTH	WIDTH	SQ.YD.
121 + 16 TO 141 + 66	RT	2,050	7	1,594
121 + 16 TO 141 + 66	LT	2,050	7	1,594
TOTAL				3,188

P:\BITUM\2bitum\CSAH 15\115 MILL.xls/A

TAPER FROM LIP OF C&G STARTING AT DEPTH OF 1" OUT TO 0" IN 7'
THE MILLINGS SHALL BE HAULED TO PRANGE PIT, SEE
SPECIAL PROVISIONS.

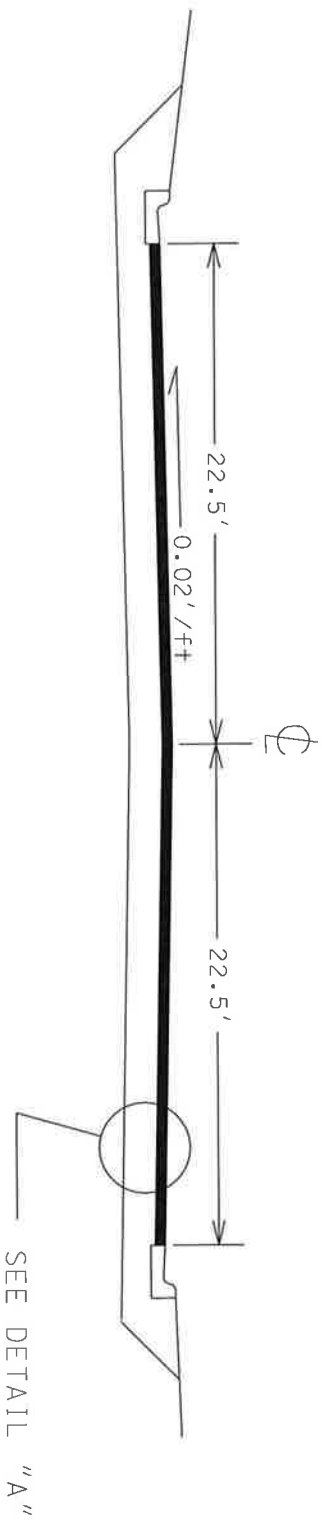
SUPERPAVE & MILLING QUANTITIES

CERTIFIED BY Alan Forsberg LIC. NO. 14720 MAR. 10, 2012

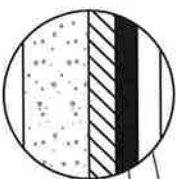
S.A.P. 07-615-08 SHEET No. 4 OF 6 SHEETS

TYPICAL SECTION

STA 121 + 16 TO STA 141 + 66



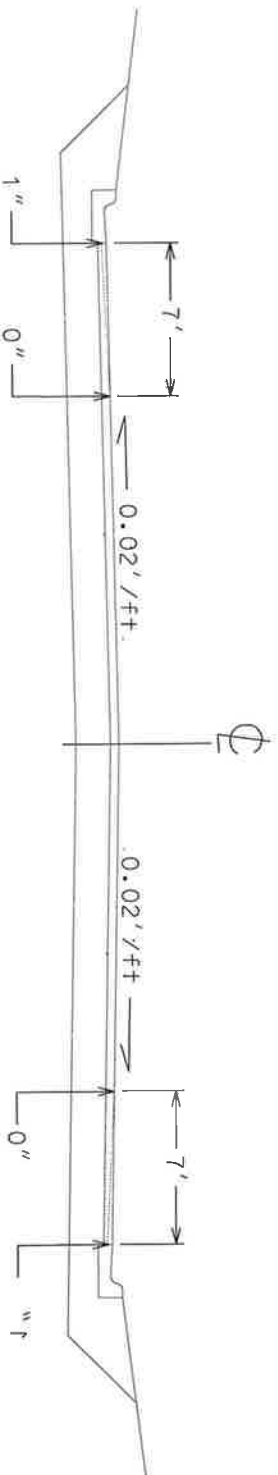
DETAIL "A"



- 1" SP WEARING COURSE MIXTURE (2360)
- INPLACE 3" WEARING COURSE MIXTURE (2331)
- INPLACE 3" BITUM. BASE COURSE MIXTURE (2331)
- INPLACE 14" AGGR. BASE CL-5 (2211)

TYPICAL MILL SECTION DETAIL

STA 121 + 16 TO STA 141 + 66



CERT. BY Alan Fording L.I.C. NO. 14720 MAR. 10, 2012 S.A.P. 07-615-08 SHEET NO. 6 OF 6 SHEETS